

Form PTO-1449
(Rev. 2-88)U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

ATTY. DOC. NO.

SERIAL NO.

960296.95491

09/114,973

INFORMATION DISCLOSURE STATEMENT

(Use several sheets if necessary)

APPLICANT(S): Dove and Shedlovsky

FILING DATE: 7/14/98

GROUP

1633
1655

U.S. PATENT DOCUMENTS

EXAMINER'S INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

FOREIGN PATENT DOCUMENTS

DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION
					YES NO

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

✓	Antoch, Marina P. et al., "Functional Identification of the Mouse Circadian Clock Gene by Transgenic BAC Rescue," <i>Cell</i> 89:655-667 (1997)
✓	Balling, Rudi, "ENU-Mouse Mutagenesis Screen," (Application for Support of a Research Center)
✓	Bateman, Nigel, "Sombre, A Viable Dominant Mutant in the House Mouse," <i>The Journal of Heredity</i> 186-189
✓	Bazin et al., "Genetic studies of phenotypic revertants of the vestigial mutant in <i>Drosophila melanogaster</i> , induced by bromouridine and ethyl methanesulfonate," <i>Mutation Research</i> 105:65-72 (1982)
✓	Brown et al., "Mouse mutagenesis-systematic studies of mammalian gene function," <i>Human Molecular Genetics</i> 7:1627-1633 (1998)
✓	Brunialti et al., "The Mouse Mutation Sarcosinemia (<i>san</i>) Maps to Chromosome 2 in a Region Homologous to Human 9q33-q34," <i>Genomics</i> 36:182-184 (1996)
	Church et al., "Isolation of genes from complex sources of mammalian gene using exon amplification," <i>Nat. Genet.</i> 6:98-105 (1994) abstract
✓	Cobb et al., "Biochemical and molecular analysis of spontaneous and induced mutations at the mouse <i>Mod-1</i> locus," <i>Mutation Research</i> 234:1-7 (1990)
✓	Collaborative Study Group for the Micronucleus Test, "Strain difference in the micronucleus test," <i>Mutation Research</i> 204:307-316 (1988)
✓	Collaborative Study Group for the Micronucleus Test, "Single Versus multiple dosing in the micronucleus test: the summary of the fourth collaborative study by CSGMT/JEMS.MMS," <i>Mutation Research</i> 234:205-222 (1990)
	Cormier, et al., "Secretory phospholipase Pla2g2a confers resistance to intestinal tumorigenesis," <i>Nature Genetics</i> 17:88-91 (1997)
	De Stasio, et al., "Characterization of Revertants of <i>unc-93(e1500)</i> in <i>Caenorhabditis elegans</i> Induced by <i>N</i> -ethyl- <i>N</i> -nitrosourea," <i>Genetics</i> 147:597-608 (1997)
✓	Dickie, Margaret M., "Mutations at the Agouti Locus in the Mouse," <i>The Journal of Heredity</i> , 20-25
✓	Dickie, Margaret M., "A New Viable Yellow Mutation in the House Mouse," <i>The Journal of Heredity</i> 84-86
✓	Dove, William F., "Anecdotal, Historical and Critical Commentaries on Genetics, The Gene, the Polygene, and the Genome" <i>Genetics</i> 134:999-1002 (1993)
✓	Dove, William F., "Anecdotal, Historical and Critical Commentaries on Genetics, Transparent Vertebrates and Their Genetic Images" <i>Genetics</i> 137:339-341 (1994)
✓	Ehling et al., "Induction of specific-locus mutations in female mice by 1-3thyl-1-nitrosourea and procarbazine," <i>Mutation Research</i> 202:139-146 (1988)
✓	Ehling, U.H., "Germ-cell mutations in mice: Standards for protecting the human genome," <i>Mutation Research</i> 213:43-53 (1989)

EXAMINER

DATE CONSIDERED

* EXAMINER: Initial if a citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. QBMA0236238

Form PTO-1449
(Rev. 2-88)U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

ATTY. DOC. NO.

SERIAL NO.

960296.95491

09/114,973

INFORMATION DISCLOSURE STATEMENT

APPLICANT(S): Dove and Shedlovsky

(Use several sheets if necessary)

FILING DATE: 7/14/98

GROUP

1633
1655

U.S. PATENT DOCUMENTS

* EXAMINER'S INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

FOREIGN PATENT DOCUMENTS

DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION
					YES NO

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

pk	✓	Fahrig, Rudolf, "Similar pigmentation characteristics in the specific-locus and the mammalian spot test," <i>The Journal of Heredity</i> 76:421-426 (1985)
	✓	Favor, Jack, "Characterization of dominant cataract mutations in mice: penetrance, fertility and homozygous viability of mutations recovered after 250 mg/kg ethylnitrosourea paternal treatment," <i>Genet. Res., Camb.</i> 44:183-197 (1984)
	✓	Favor et al., "Towards an understanding of the nature and fitness of induced mutations in germ cells of mice: homozygous viability and heterozygous fitness effects of induced specific-locus, dominant cataract and enzyme-activity mutations," <i>Mutation Research</i> 212:67-75 (1989)
	✓	Favor et al., "The effect of dose fractionation on the frequency of ethylnitrosourea-induced dominant cataract and recessive specific locus mutations in germ cells of the mouse," <i>Mutation Research</i> 198:269-275 (1988)
		Favor et al., "The frequency of dominant cataract and recessive specific-locus mutations and mutation mosaics in F ₁ mice derived from post-spermatogonial treatment with ethylnitrosourea," <i>Mutation Research</i> 229:105-114 (1990)
		Generoso et al., "Mutagen-induced fetal anomalies and death following treatment of females within hours after mating," <i>Mutation Research</i> 199:175-181 (1988)
	✓	Giometti et al., "Detection of Heritable Mutations as Quantitative Changes in Protein Expression," <i>The Journal of Biological Chemistry</i> 262:12764-12767 (1987)
	✓	Giometti et al., "A Heritable Variant of Mouse Liver Ornithine Aminotransferase (EC2.6.1.13) Induced by Ethylnitrosourea," <i>The Journal of Biological Chemistry</i> 263:15781-15784 (1988)
	✓	Giometti et al., "Heritable protein variants induced by exposure to ethylnitrosourea: Heritability, subcellular location, and tissue distribution," <i>Mutation Research</i> 202:9-17 (1988)
	✓	Gould et al., "Action of <i>Min</i> and <i>Mom1</i> on Neoplasia in Ectopic Intestinal Grafts," <i>Cell Growth & Differentiation</i> 7:1361-1368 (1996)
	✓	Harte et al., "Genetic Analysis of Mutations at the <i>Glued</i> Locus and Interacting Loci in <i>Drosophila Melanogaster</i> ," <i>D. Melanogaster G1 Mutations</i> 477-501 (1982)
		Hayashi et al., "Difference between intraperitoneal and oral gavage application in the micronucleus test," <i>Mutation Research</i> 223:329-344 (1989)
	✓	Hitotsumachi et al., "Dose-repetition increases the mutagenic effectiveness of <i>N</i> -ethyl- <i>N</i> -nitrosourea in mouse spermatogonia," <i>Proc. Natl. Acad. Sci. USA</i> 82:6619-6621 (1985)
	✓	Holdener et al., "Phenotypic and physical analysis of a chemically induced mutation disrupting anterior axial development in the mouse," <i>Mammalian Genome</i> 6:474-475 (1995)
		Holdener et al., "Physical Localization of <i>eed</i> : A Region of Mouse Chromosome 7 Required for Gastrulation," <i>Genetics</i> 24:447-456 (1995)
		Huang et al., "Comparison of baseline sister-chromatid exchanges (SCE), cyclophosphamide-, ethylnitrosourea (ENU)-induced SCE, ENU-induced cell-cycle delay and chromosome aberrations between Peru and laboratory mice," <i>Mutations Research</i> 230:93-100 (1990)

EXAMINER

DATE CONSIDERED

4/2/01

* EXAMINER: Initial if a citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. QBMA/D\236238

Form PTO-1449
(Rev. 2-88)U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

ATTY. DOC. NO.

SERIAL NO.

960296.95491

09/114,973

APPLICANT(S): Dove and Shedlovsky

FILING DATE: 7/14/98

GROUP

1655 (63)

INFORMATION DISCLOSURE STATEMENT
BY APPLICANT
(Use several sheets if necessary)

U.S. PATENT DOCUMENTS

* EXAMINER'S INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

FOREIGN PATENT DOCUMENTS

DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION
					YES NO

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

gk	✓	Johnson et al., "Molecular Analysis of 36 Mutations at the Mouse <i>pink-eyed dilution</i> (<i>p</i>) Locus," <i>Genetics</i> 141:1563-1571 (1995)
	✓	Johnson et al., "High resolution metrical analysis applied to the assessment of damage associated with induced mutations in the mouse," <i>Mutation Research</i> 229:141-159 (1990)
	✓	Justice et al., "Induction of new mutations in a mouse <i>t</i> -haplotype using ethylnitrosourea mutagenesis," <i>Genet. Res., Camb.</i> 47:187-192 (1986)
	✓	Kenyon, Cynthia, "The Nematode <i>Caenorhabditis elegans</i> ," <i>Science</i> 240:1448-1452 (1988)
	✓	Kerscher et al., "Two New Cataract Loci, <i>Ccw</i> and <i>To3</i> , and Further Mapping of the <i>Npp</i> and <i>Opj</i> Cataracts in the Mouse," <i>Genomics</i> 36:17-21 (1996)
	✓	King et al., "The Mouse <i>Clock</i> Mutation Behaves as an Antimorph and Maps Within the <i>W^{19H}</i> Deletion, Distal of <i>Kit</i> ," <i>Genetics</i> 146:1049-1060 (1997)
	✓	Klopp et al., "Three Murine Cataract Mutants (<i>Cat2</i>) Are Defective in Different γ -Crystallin Genes," <i>Genomics</i> 52:152-158 (1998)
	✓	Kratochvilova et al., "Dominant cataract and recessive specific-locus mutations detected in offspring of procarbazine-treated male mice," <i>Mutation Research</i> 88:298-301
	✓	Lewis et al., "ENU mutagenesis in the mouse electrophoretic specific-locus test-1. Dose-response relationship of electrophoretically-detected mutations arising from mouse spermatogonia treated with ethylnitrosourea," <i>Mutation Research</i> 249:311-315 (1991)
	✓	Lewis et al., "ENU mutagenesis in the mouse electrophoretic specific-locus test-2. Mutational studies of mature oocytes," <i>Mutation Research</i> 296:129-133 (1992)
		Martelli et al., "Comparison of micronucleus formation in mouse bone marrow and spleen," <i>Mutation Research</i> 292:63-67 (1993)
	✓	McDonald, J. David, "Using High-Efficiency Mouse Germline Mutagenesis to Investigate Complex Biological Phenomena: Genetic Diseases, Behavior, and Development," <i>High-Efficiency Mouse Germline Mutagenesis</i> 303-305 (1995)
	✓	McDonald et al., "Hyperphenylalaninemia in the <i>hph-1</i> Mouse Mutant," <i>Pediatric Research</i> 23:63-67 (1987)
	✓	McDonald et al., "Biochemical Defect of the <i>hph-1</i> Mouse Mutant Is a Deficiency in GTP-Cyclohydrolase Activity," <i>Journal of Neurochemistry</i> 50:655-657 (1987)
	✓	Miller et al., "Genetic Studies of the Mouse Mutations <i>mahogany</i> and <i>mahoganoid</i> ," <i>Genetics</i> 146:1407-1415 (1997)
	✓	Montagutelli et al., " <i>aku</i> , a Mutation of the Mouse Homologous to Human Alkaptonuria, maps to Chromosome 16," <i>Genomics</i> 19:9-11 (1994)
	✓	Moore et al., "The Murine Dilute Suppressor Gene <i>dsu</i> Suppresses the Coat-Color Phenotype of Three Pigment Mutations That Alter Melanocyte Morphology, <i>d</i> , <i>ash</i> and <i>ln</i> ," <i>Genetics</i> 119:933-941 (1988)
	✓	Morris, Suzanne M., "The genetic toxicology of 5-fluoropyrimidines and 5-chlorouracil," <i>Mutation Research</i> 297:39-51 (1993)

EXAMINER

DATE CONSIDERED

4/2/01

* EXAMINER: Initial if a citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. QBMA\236238

Form PTO-1449
(Rev. 2-88)U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

ATTY. DOC. NO.

SERIAL NO.

960296.95491

09/114,973

INFORMATION DISCLOSURE STATEMENT

BY APPLICANT
(Use several sheets if necessary)

APPLICANT(S): Dove and Shedlovsky

FILING DATE: 7/14/98

GROUP

1633
1655

U.S. PATENT DOCUMENTS

* EXAMINER'S INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

FOREIGN PATENT DOCUMENTS

DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION
					YES NO

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

✓	Preat, Thomas, "Characterization of Suppressor of fused, a Complete Suppressor of the fused Segment Polarity Gene of <i>Drosophila melanogaster</i> ," <i>Genetics</i> 132:725-736 (1992)
✓	Provost et al., "Response to the Commentary Article: Comparison of mutation frequencies obtained using transgenes and the specific-locus mutation system in male mouse-germ cells," <i>Mutation Research</i> 298:145-147 (1992)
✓	Provost et al., "Transgenic systems for in vivo mutation analysis," <i>Mutation Research</i> 288:133-149 (1993)
✓	Rinchik et al., "A strategy for fine-structure functional analysis of a 6- to 11-centimorgan region of mouse chromosome 7 by high-efficiency mutagenesis," <i>Proc. Natl. Acad. Sci. USA</i> 87:896-900 (1990)
✓	Rinchik, Eugene M., "Chemical mutagenesis and fine-structure functional analysis of the mouse genome," <i>TIG</i> 7:15-21 (1991)
✓	Rinchik et al., "Deletion Mapping of Four Loci Defined by <i>N</i> -Ethyl- <i>N</i> -Nitrosourea-Induced Postimplantation-lethal Mutations Within the <i>pid-Hbb</i> Region of Mouse Chromosome 7," <i>Genetics</i> 135:1117-1123 (1993)
✓	Rinchik et al., "Molecular Analysis of Radiation-induced albino (<i>c</i>)-Locus Mutations That Cause Death at Preimplantation Stages of Development," <i>Genetics</i> 135:1107-1116 (1993)
✓	Rinchik et al., "Molecular Genetics of the Brown (<i>b</i>)-Locus Region of Mouse Chromosome 4. I. Origin and Molecular Mapping of Radiation- and Chemical-Induced Lethal Brown Deletions," <i>Genetics</i> 137:845-854 (1994)
✓	Rinchik, Eugene M., "Molecular Genetics of the Brown (<i>b</i>)-Locus Region of Mouse Chromosome 4. II. Complementation Analyses of Lethal Brown Deletions," <i>Genetics</i> 137:855-856 (1994)
✓	Rubin, Gerald M., " <i>Drosophila melanogaster</i> as an Experimental Organism," <i>Science</i> 24:1453-1459 (1988)
✓	Ruddle et al., "Hybrid Cells and Human Genes," <i>Genetic Analysis</i> 122-157 (1974)
✓	Russell et al., "The Mouse Specific-Locus Test with Agents Other Than Radiations, Interpretation of Data and Recommendations for Further Work," <i>Mutation Research</i> 86:329-354 (1981)
✓	Russell et al., "The paternal genome in mouse zygotes is less sensitive to ENU mutagenesis than the maternal genome," <i>Mutation Research</i> 248:203-209 (1991)
✓	Russell et al., "Frequency and nature of specific-locus mutations induced in female mice by radiations and chemicals: a review," <i>Mutation Research</i> 296:107-127 (1992)
✓	Russell et al., "Structural differences between specific-locus mutations induced by different exposure regimes in mouse spermatogonial stem cells," <i>Mutation Research</i> 288:187-195 (1993)
✓	Russell et al., "Dose-response curve for ethylnitrosourea-induced specific-locus mutations in mouse spermatogonia," <i>Proc. Natl. Acad. Sci. USA</i> 79:3589-3591 (1982)
✓	Sandulache et al., "Genetic Instability at the <i>agouti</i> Locus of the Mouse (<i>Mus musculus</i>). I. Increased Reverse Mutation Frequency to the <i>A</i> Allele in <i>A/a</i> Heterozygotes," <i>Genetics</i> 137:1079-1087 (1994)
✓	Searle et al., "Mouse homologues of human hereditary disease," <i>J. Med. Genet.</i> 31:1-19 (1994)

EXAMINER

DATE CONSIDERED

* EXAMINER: Initial if a citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. QBMAD\236238

Form PTO-1449
(Rev. 2-88)U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

ATTY. DOC. NO.

SERIAL NO.

JAN 22 2001

INFORMATION DISCLOSURE STATEMENT

BY APPLICANT

(Use several sheets if necessary)

960296.95491

09/114,973

APPLICANT(SI): Dove and Shedlovsky

FILING DATE: 7/14/98

GROUP

1633
1655

U.S. PATENT DOCUMENTS

* EXAMINER'S INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

FOREIGN PATENT DOCUMENTS

DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION
					YES NO

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

jk	✓	Shedlovsky et al., "Saturation germ line mutagenesis of the murine <i>t</i> region including a lethal allele at the quaking locus," <i>Proc. Natl. Acad. Sci. USA</i> 85:180-184 (1988)	✓
	✓	Shedlovsky et al., "Mouse Models of Human Phenylketonuria," <i>Genetics</i> 134:1205-1210 (1993)	✓
	✓	Shoemaker et al., "Studies of neoplasia in the Min mouse," <i>Biochimica et Biophysica Acta</i> 1332:F25-F48 (1997)	✓
	✓	Simon et al., "Ras1 and a Putative Guanine Nucleotide Exchange Factor Perform Crucial Steps in Signaling by the Sevenless Protein Tyrosine Kinase," <i>Cell</i> 67:701-716 (1991)	✓
	✓	Suzuki et al., "The concomitant detection of gene mutation and micronucleus induction by mitomycin C in vivo using <i>lacZ</i> transgenic mice," <i>Mutation Research</i> 285:219-224 (1993)	✓
	✓	Takahashi et al., "Forward and Reverse Genetic Approaches to Behavior in the Mouse," <i>Science</i> 264:1724-1732 (1994)	✓
	✓	van Zeeland et al., "DNA adduct formation in mouse testis by ethylating agents: a comparison with germ-cell mutagenesis," <i>Mutation Research</i> 231:55-62 (1990)	✓
	✓	Vitaterna et al., "Mutagenesis and Mapping of a Mouse Gene, <i>Clock</i> , Essential for Circadian Behavior," <i>Science</i> 264:719-725 (1994)	✓
	✓	Wang et al., "Coat Color Genetics of <i>Peromyscus</i> : II. Tan Streak-A New recessive Mutation in the Deer Mouse, <i>P. maniculatus</i> ," <i>The Journal of Heredity</i> 84: 305-307 (1993)	✓
	✓	Yamamoto et al., "Dose-dependent Induction of Both Pepsinogen-altered Pyloric Glands and Adenocarcinomas in the glandular Stomach of C3H Mice Treated with <i>N</i> -Methyl- <i>N</i> -nitrosourea," <i>Cancer Res.</i> 58:238-244 (1997)	✓
	✓	Yamasaki et al., "Mutational activation of <i>H-ras</i> oncogene transformability by alkyl nitrosourea-induced DNA damage," <i>Mutation Research</i> 266:241-252 (1992)	✓

EXAMINER

J. H. Kern

DATE CONSIDERED

4/2/01

* EXAMINER: Initial if a citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. QBMAD\236238